(+AST) Wayne ~~Grothuer~~ FY
ASDSF ~~Mark Hooper~~ - FYI 7
13.5

November 17, 1983

Ms. Ernesta Barnes, Regional Administrator
U.S. Environmental Protection Agency, Region X
1200 Sixth Avenue
MS 601
Seattle, WA 98101

Dear Ms. Barnes:

I hope the attached testimony on the proposed arsenic standard will be useful to you in developing your recommendations to the Administrator. As I've noted in my testimony, I would like to receive copies of drafts and the final Region X recommendations to Mr. Ruckelshaus.

I believe you and your staff are more likely to have a good understanding of this issue as it pertains to the people in this area than your peers in Washington, D.C. In making your recommendation, I ask that you exercise the judgement entrusted you to apply the strictest standards possible for protecting the public health. I recognize this will mean a substantial departure from the standards as proposed thus far and that the issues involved demand your leadership and technical support.

If you have any questions with respect to this material or seek clarification, I can be reached at (b) (6) or (b) (6), at the following address: (b) (6) (b) (6), Vashon, WA 98070. Also, if you have any problems with making the documents available that I have requested, please contact me as soon as possible.

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REGIONAL ADMINISTRATOR

Thank you for your thoughtful consideration of my comments. I look forward to further involvement in this process in the future.

Sincerely,

(b) (6)

(b) (6) :db

cc: w/attachment
Senator Slade Gorton
Senator Dan Evans
Rep. Mike Lowry
Rep. Rod Chandler
Mayor Doug Sutherland
Mr. Art Dahmkoehler
Ms. Alexandra Smith
Mr. Clark Gaulding
Ms. Dana Davoli
Mr. Wayne Grothier
Mr. Mike Johnston
Dr. Karle Mottet
Dr. Gil Omenn
Dr. Lincoln Polisar
Mr. Frank Jackson

Central Docket Section
United States Environmental Protection Agency
401 M. Street S.W.
Washington, D.C. 20460

Re: Docket A-80-40

Comments on the EPA Proposed Hazardous Air Pollutant Standards for Arsenic Emissions from Copper Smelters, Glass Plants (48 FR 33 112, July 20, 1983)

Thank you for this opportunity to present comments. My name is (b) (6) Vashon, WA 98070. I am a resident of Vashon Island, a parent and a professional with ten years experience in environmental assessment.

My understanding is that the primary purpose of setting forth the proposed arsenic standard is to protect the public health. Also, EPA has interpreted Section 112 of the Clean Air Act to require controls at least to the level that reflects the Best Available Technology (BAT) and to a more stringent level if necessary to prevent unreasonable health risks.

After attending many meetings and reviewing available documents, I must conclude that the Best Available Technology has not yet been analyzed by EPA and that the public health will not be adequately protected if the standard is adopted as proposed. Furthermore, the Environmental Impact Statement (EIS) prepared on the proposed Standard does not meet the intent of the National Environmental Policy Act (NEPA) nor does it comply with minimum federal regulations for implementing the provisions of NEPA. It is not surprising that this document has not received much official acknowledgement. Nonetheless, it is important for it is a primary tool by which the public is informed about the proposal and alternatives and by which decision-makers will consider the environmental consequences of their actions.

For background, it is important to cite sections of the regulations implementing NEPA most relevant to areas of insufficiency in this EIS. Section 1502.14 titled: "Alternatives Including the Proposed Action," calls the Alternatives section "the heart of the EIS." In this section, agencies are required to:

1. Rigorously explore and objectively evaluate all reasonable alternatives and for alternatives which are eliminated from detailed study, discuss the reasons for elimination;

2. Devote substantial treatment to each alternative considered in detail, including the proposed action, so that reviewers may evaluate comparative merits;

3. Include reasonable alternatives not within the jurisdiction of the lead agency; and

4. Identify the environmentally preferable alternative and reasons for identifying it as such.

The alternatives section contained in the Draft EIS on the proposed arsenic standard is a total of one page long. It offers little choice and none of the alternatives represent the Best Available Technology. The "choices" are:

1. to do nothing

2. to address only one arsenic emission source - the fugitive emissions from the converters, and

3. to limit arsenic in the feed ore which the writers assume would result in plant closure and dismiss without analysis.

In essence, only the proposed action and no alternatives are looked at.

Alternatives needing analysis include an alternative which meets or matches the conditions set forth in the Puget Sound Air Pollution Control Agency's (PSAPCA) SO_2 variance.

As part of the variance, ASARCO must evaluate alternative processing methods to control SO_2 emissions by 90 percent in 1987. My understanding is that this requirement would be likely to substantially lessen arsenic emissions as well. For example, one process mentioned by PSAPCA results in almost all the arsenic being collected in the roasting process step.

Converter hooding as proposed by EPA in Regulatory Alternative #2 of the EIS would address only a fraction of the emissions problem. Recent test data show that the converters are responsible for only about 5 percent of the total emissions from the smelter. It appears that a much larger source of arsenic emissions may be the electrostatic precipitator which treats exhaust gases from the reverberatory furnaces. Additional smelting processes such as installation of a baghouse system over the reverberatory furnaces need to be analyzed. Control efficiencies of this type of system are in the range of 99 percent, are available and proven. The BAT analysis needs considerable expansion to include full consideration of alternative smelting processes.

Also, the analysis of regulatory alternatives needs to provide for the possible reduction of the frequency and duration of production curtailment resulting from installation of the secondary hoods. This could actually allow the smelter to operate at a higher production rate for a net increase in arsenic emissions.

Another alternative needing serious consideration is limitation of the arsenic content in the ore. This is not adequately dealt with in the EIS and is a practice common to other copper smelters in operation in this country.

We have been told that more stringent regulatory measures such as those I've mentioned would result in the plant's closure and the loss of many jobs to the area. Unfortunately, it seems that this threat, rather than scientific and technical information, has been used by EPA to establish the rationale for setting the arsenic control technology at the level proposed.

The very notion that people in this area need to choose between jobs and the environmental safety is unfounded and insulting. To couch the decision in these terms means that the EPA has all but turned policy guidance for setting the standards over to industry representatives and has neglected its essential role of protecting the environment and public health. In crudest terms, the "policy" guiding development of the standard reads: anything ASARCO isn't agreeable to out front shouldn't be analyzed.

I think a majority of the people affected by this process are much less impressed by the threat of plant closure. First, this plant has been in operation since 1915 and has probably paid for itself many times over. At some point the industry must account for updating and modernization. Secondly, ASARCO is operating in a region with the cheapest electricity in the U.S. and probably highly competitive labor costs due to comparatively high unemployment, also an easily accessible and inexpensive water resource. These economic advantages should provide some leeway in the company's investment decisions. Finally, most business people recognize there is a certain cost of doing business including what it costs to protect the environment and that this cost can be justifiably built into product pricing.

People in the Tacoma area also recognize that the presence of polluting industries discourage certain kinds of economic activity and limit jobs. Tacoma City Light recently received the results of an economic development study that reported that Tacoma's national image as a polluted, highly industrialized city is crippling the area's chance of recruiting growing

high technology and financial service companies. The City of Tacoma has recommended more stringent controls than EPA has proposed, in part, out of concern for the area's economic health.

One way or another, society pays; either through increased health care needs and subsidization of cancer research and cleanup programs or through higher prices for products containing arsenic or dependent on their use. Given the choice, I'd guess that most everyone would rather pay more for pesticides than accept an increased chance of lung cancer.

I would like to comment briefly on the "Health Assessment Document for Inorganic Arsenic" now in review draft. The introduction explains that the report evaluates health effects associated with exposure to inorganic arsenic thought to be of most concern to the general population.

The largest body of scientific literature reviewed in this document deals with cancer, however, there are epidemiological studies linking exposures of both smelter workers and populations surrounding a smelter in Northern Sweden to statistically significant increases in spontaneous abortion and lowered birth weights. The studies on worker exposure also show an increased rate of congenital malformations in the offspring of female employees. The Health Assessment Document also mentions that infants and young children are especially susceptible to short-term oral exposure of large doses of arsenic with effects on the central nervous system, resulting in epilepsy and mental retardation.

While EPA has in the Health Assessment Document ranked five health effects as "germane" to the general population, it has not included these effects in the ranking of relevant concerns. The reasoning for this is unclear.

My own view is that the more immediate risks of an involuntarily terminated pregnancy or even a retarded child are much more threatening and of far greater concern than the possibility of getting cancer in the more distant future. The Health Assessment Document makes unsubstantiated conclusions regarding health concerns "relevant" to exposure of surrounding populations to inorganic arsenic from copper smelters.

Substantial revisions are needed to the Draft EIS to incorporate significant conclusions from the final version of the Health Assessment Document, and an attempt should be made to fully describe the range of possible health effects as well as compare the alternatives with respect to their chances of reducing these health effects. The section of the Draft EIS which is intended to address the "Affected Environment" does not deal

with health effects. This is a fundamental requirement of NEPA (see Section 1508.8 of the regulations). The omission of such discussion in the Draft EIS and the lack of analysis of alternatives warrant preparation and circulation of a revised or supplemental Draft EIS. This also is necessary because so much of the primary data used in the Draft EIS is out-of-date.

EPA officials have suggested that the linear extrapolation model used to estimate the risk of cancer provides a rough but plausible estimate of the upper level of risk, that is, in EPA's estimation it is unlikely that the true risk would be more than estimated but could be considerably lower. This seems to be an overoptimistic conclusion for a number of reasons including that, based on recent test information, there are reasons to doubt the estimates of emissions from various sources within the smelter. Also, the model only considers ingestion of arsenic by inhalation which among individuals of the general population is greatly compounded by ingestion via food and water intake. Another consideration is that past a certain point, the human body has a reduced ability to process arsenic compounds, thereby elevating concentrations of the toxic forms. I have not seen any explanation of whether or how the linear extrapolation accounts for these concerns.

My hope is that your (The Regional Administrator, regional staff, and EPA officials who drafted the proposed standard and background documents) collective recognition of the serious and unnecessary health hazards presented by existing operations of the ASARCO smelter will guide the Region X office to strongly recommend to Mr. Ruckelshaus a standard with a much higher control efficiency than that currently proposed.

Mr. Ruckelshaus has been quoted as saying: "For me to sit here in Washington and tell the people of Tacoma what is acceptable risk would be at best arrogant and at worst inexcusable." It is the region's responsibility to let the Administrator know in clear terms that the standard as proposed does not provide for an adequate margin of safety to protect public health and also to recommend an environmentally acceptable means of doing so. I believe there is sufficient information available today to recommend such a standard. There needs to be a deliberate change in direction by the EPA to be responsive to the people in this region and to carry out the responsibilities mandated in the Clean Air Act.

Thank you again for the opportunity to comment on the proposed standard and background information contained in the docket. I would like to be a party of record in further deliberations on this issue and I am requesting copies of Region X's review and final recommendations to the Administrator. I can be reached at the address given above or may be contacted by phone at (b) (6) or (b) (6).